To: Caporale, Cynthia[Caporale.Cynthia@epa.gov]; Graybill, Eric[graybill.eric@epa.gov]
From: Gundersen, Jennifer
Sent: Sat 1/25/2014 5:25:43 PM
Subject: RE: PPH Discussion Group

Interesting results on HPLC/uv. I can see the 1-phenoxy-2-propanol cas # 770-35-4 as the individual compound. When
I ran the sample we got yesterday, I could also see the peak but it was very small in comparison to the 4 large peaks with similar uv spectra.

Everything is qualitative right now. I just did quick dilutions of the materials to estimate response and retention time. Will work on a cal curve for the 1-phenoxy-2-propanol cas # 770-35-4 today.

-----Original Message-----
From: Caporale, Cynthia
Sent: Saturday, January 25, 2014 12:19 PM
To: Slayton, Joe; Gundersen, Jennifer; Graybill, Eric; Warner, Sue; Zawodny, Peggy
Subject: Fw: PPH Discussion Group

From: Weis, Christopher (NIH/NIEHS) [E] <christopher.weis@nih.gov>
Sent: Saturday, January 25, 2014 12:17:14 PM
To: Grant, Gregory L LTC USARMY (US); Ex. 6 - Personal Privacy
'Jeffrey.McIntyre@amwater.com'; Arguto, William; Ex. 4 - CBI
bucher@niehs.nih.gov; Burns, Francis; Capacasa, Jon; Caporale, Cynthia; ' Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy com'; Cox, Edward C MAJ USARMY NG VAARNG (US);
'letitia.tierney@wv.gov'; Ex. 6 - Personal Privacy Cseh, Larry
(ATSDR/DTHHS/OD); ' Ex. 6 - Personal Privacy '; 'martha.a.mcelfresh@wv.gov';
masten@niehs.nih.gov; Miller, Aubrey (NIH/NIEHS) [E]; Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy '; Singhvi, Raj; 'steven.hedrick@matricresearch.com'; Ex. 6 - Personal Privacy
Kapil, Vikas (CDC/ONDIEH/NCEH); 'walter.m.ivey@wv.gov'; Werner, Lora
Subject: RE: PPH Discussion Group

Lt. Col. Grant:

In support of CDC/ATSDR activities, we have been in contact with the manufacturer of PPH, Basic. They have been cooperatively providing key information to us regarding toxicology and exposure. In cooperation with CDC/ATSDR and other partners we are reviewing this information. As we continue to receive and process toxicology information, I encourage the analytical team to continue to work toward lowering the reporting limit for PPH, possibly considering sample concentration and/or product derivatization.

Ex. 4 - CBI at the DOW Chemical Company is available for consultation on anlytical chemistry for this product and I have included his contact information below.

Chris

Christopher P Weis, Ph.D., DABT.
Toxicology Liaison / Senior Advisor
Office of the Director
National Institute of Environmental Health Science National Institutes of Health Bethesda, MD
Tel: 301.496.3511

Ex. 4 - CBI

From: Grant, Gregory L LTC USARMY (US) Ex. 6 - Personal Privacy
Sent: Saturday, January 25, 2014 11:35 AM
To: Ex. 6 - Personal Privacy 'arguto.william@epa.gov'; Ex. 4 - CBI Bucher, John (NIH/NIEHS) [E]; 'burns.fran@epa.gov'; 'capacasa.jon@epa.gov'; 'caporale.cynthia@epa.gov'; Ex. 6 - Personal Privacy ; Weis, Christopher (NIH/NIEHS) [E]; Ex. 6 - Personal Privacy ; Cox, Edward C MAJ USARMY NG VAARNG (US); Ex. 6 - Personal Privacy 'letitia.tierney@wv.gov'; Ex. 6 - Personal Privacy Cseh, Larry (ATSDR/DTHHS/OD); Ex. 6 - Personal Privacy '; 'martha.a.mcelfresh@wv.gov'; Masten, Scott (NIH/NIEHS) [E]; Miller, Aubrey (NIH/NIEHS) [E]; Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy 'singhvi.raj@epa.gov'; Ex. 6 - Personal Privacy
CTR (US); Kapil, Vikas (CDC/ONDIEH/NCEH); 'walter.m.ivey@wv.gov'; 'werner.lora@epa.gov'
Subject: Re: PPH Discussion Group

CDC/ATSDR/EPA,

Does anyone on this group have update on toxicology information for the PPh. We are still waiting on this information to provide to labs as far as non detect threshold being set. Any update would be appreciated even if no further action has been decided.

Thanks,

Greg Grant, LTC, WVARNG
Commander
35th Civil Support Team (WMD)
5 Armory Drive
Saint Albans, WV. 25177

Ex. 6 - Personal Privacy

Sent from my blackberry

From: Ex. 6 - Personal Privacy
Sent: Saturday, January 25, 2014 11:10 AM
To: Ex. 6 - Personal Privacy arguto.william@epa.gov <arguto.william@epa.gov>; Ex. 4 - CBI bucher@niehs.nih.gov <bucher@niehs.nih.gov>; burns.fran@epa.gov <burns.fran@epa.gov>;

capacasa.jon@epa.gov <capacasa.jon@epa.gov>; caporale.cynthia@epa.gov
<caporale.cynthia@epa.gov>; Ex. 6 - Personal Privacy >; christopher.weis@nih.gov
<christopher.weis@nih.gov>; Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy Cox, Edward C MAJ USARMY NG VAARNG (US);
@matricinnovates.com>; Grant, Gregory L LTC USARMY (US);
letitia.tierney@wv.gov <letitia.tierney@wv.gov>; Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy Cseh, Larry F CAPT (US); Ex. 6 - Personal Privacy
com>; martha.a.mcelfresh@wv.gov <martha.a.mcelfresh@wv.gov>;
masten@niehs.nih.gov <masten@niehs.nih.gov>; miller.aubrey@nih.gov <miller.aubrey@nih.gov>;
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(US); vck3@cdc.gov <vck3@cdc.gov>; walter.m.ivey@wv.gov <walter.m.ivey@wv.gov>;
werner.lora@epa.gov <werner.lora@epa.gov>
Subject: RE: PPH Discussion Group

We have completed our analysis of the samples for 1/10/14 through 1/16/14. The detection limit of 0.6 ppm of the DiPPH was confirmed ,using a 0.6 ppm DiPPH and 0.6 ppm PPH spiked standard. The standard was run before and after the water samples to ensure the detection was not lost due to any instrument problems that could have occurred during the sample sequence.

To interpret the accurate limits of detection for the water samples, it is recommended the MCHM tank compositions be verified in a duplicate analysis or be determined independently.
Our initial analysis of the MCHM tank concluded that the ratio of DiPPH to PPH was 50:50. So the detection at this composition would be 1.2 PPM for the combined PPH + DiPPH.
Our current understanding of the MCHM tank contents suggest that the PPH to DiPPH ratio is closer to 5 : 95 to 10 : 90. Using this ratio the detection limits for the combined PPH + DiPPH would be 0.7 ppm.

The PPH tank sample was analyzed earlier and the PPH to DiPPH was in agreement with the 5 :95 to 10 : 90 ratio. However, a ratio much higher in PPH is not out of question and can be reasoned based on the manufacturing process. This is why we are recommending the MCHM tank sample be further analyzed for an accurate determination of the PPH to DiPPH ratio.

The water sample detection limits assume is that the MCHM tank contents were well mixed, the composition was uniform throughout the tank when breeched, and the current MCHM sample represents the spill composition..

The results are tabulated below.

Priority Samples

Top Priority

Date

Time

Result

0.6 ppm (DiPPH spiked)

1/24/2014

-

Detected

P003 Finished

1/10/2014

0845

Not Detected

P004 Finished

1/10/2014

1040

Not Detected

P005 Raw

1/10/2014

0845

Not Detected

P006 Raw

1/10/2014

1040

Not Detected

Raw

1/11/2014

0905

Not Detected

Finished

1/11/2014

0920

Not Detected

Raw

1/11/2014

1000

Not Detected

Finished

1/11/2014

1000

Not Detected

Raw

1/12/2014

1600

Not Detected

Finished

1/12/2014

1600

Not Detected

Raw

1/12/2014

2200

Not Detected

Finished

1/12/2014

2200

Not Detected

P007 Raw

1/13/2014

0210

Not Detected

Finished

1/13/2014

0210

Not Detected

P008 Finished

1/13/2014

0600

Not Detected

P009 Raw

1/13/2014

0600

Not Detected

Raw Morning

1/14/2014

0600

Not Detected

Finished Morning

1/14/2014

0800

Not Detected

Raw Afternoon

1/14/2014

1800

Not Detected

Finished Afternoon

1/14/2014

1800

Not Detected

Raw Morning

1/15/2014

0600

Not Detected

Finished Morning

1/15/2014

0600

Not Detected

Raw Afternoon

1/15/2014

1800

Not Detected

Finished Afternoon

1/15/2014

1800

Not Detected

Raw Morning

1/16/2014

0500

Not Detected

Finished Morning

1/16/2014

0500

Not Detected

Raw Afternoon

1/16/2014

1700

Not Detected

Finished Afternoon

1/16/2014

1700

Not Detected

0.6 ppm (DiPPH spiked)

1/25/2014

-

Detected

If anyone has any question please contact me at Ex. 6 - Personal Privacy

Ex. 6 - Personal Privacy

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[https://mail.matricresearch.com/downloads/MATRICSquareLogo.gif]

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